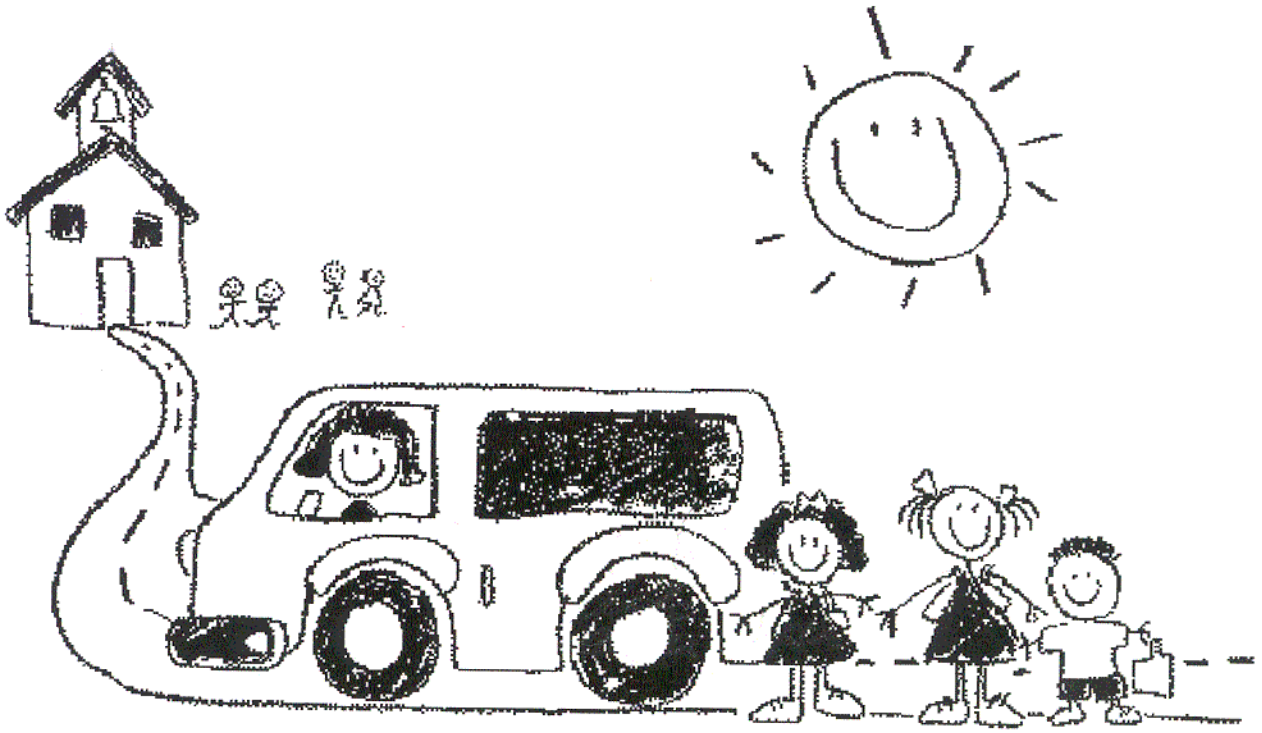

MAP Spring 1999

Released Items & Rubrics
Elementary
Mathematics

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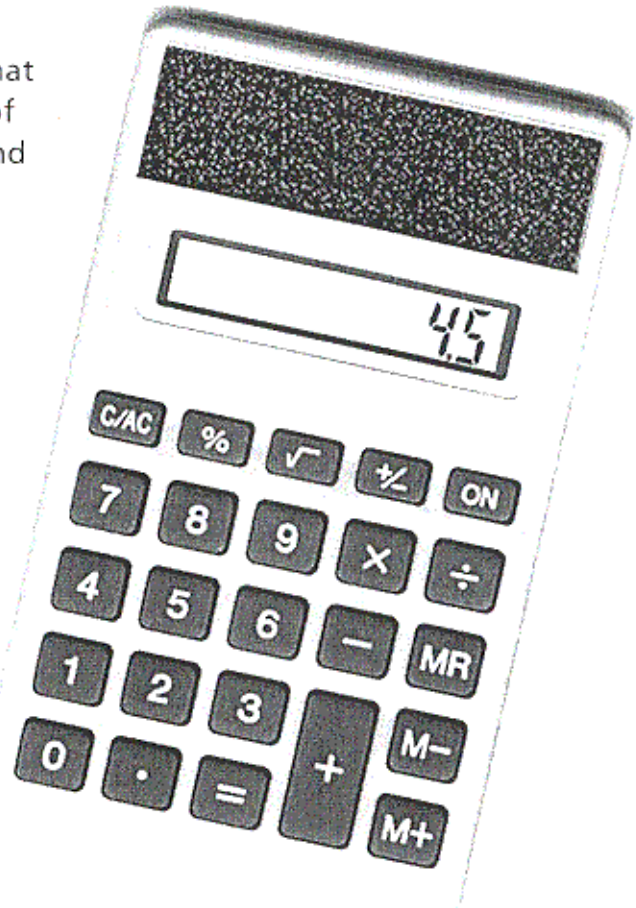
4 Amy, Eric, and Kayla decide to share a pie that costs $7.50. The 3 friends will split the cost of the pie equally. Eric used his calculator to find how much each of them should pay. The calculator display shows Eric's answer.



Eric got $4.50 for an answer. Is $4.50 a reasonable answer?

_____

In the box below, explain why you think Eric's answer *is* or *is not* reasonable.

Go On

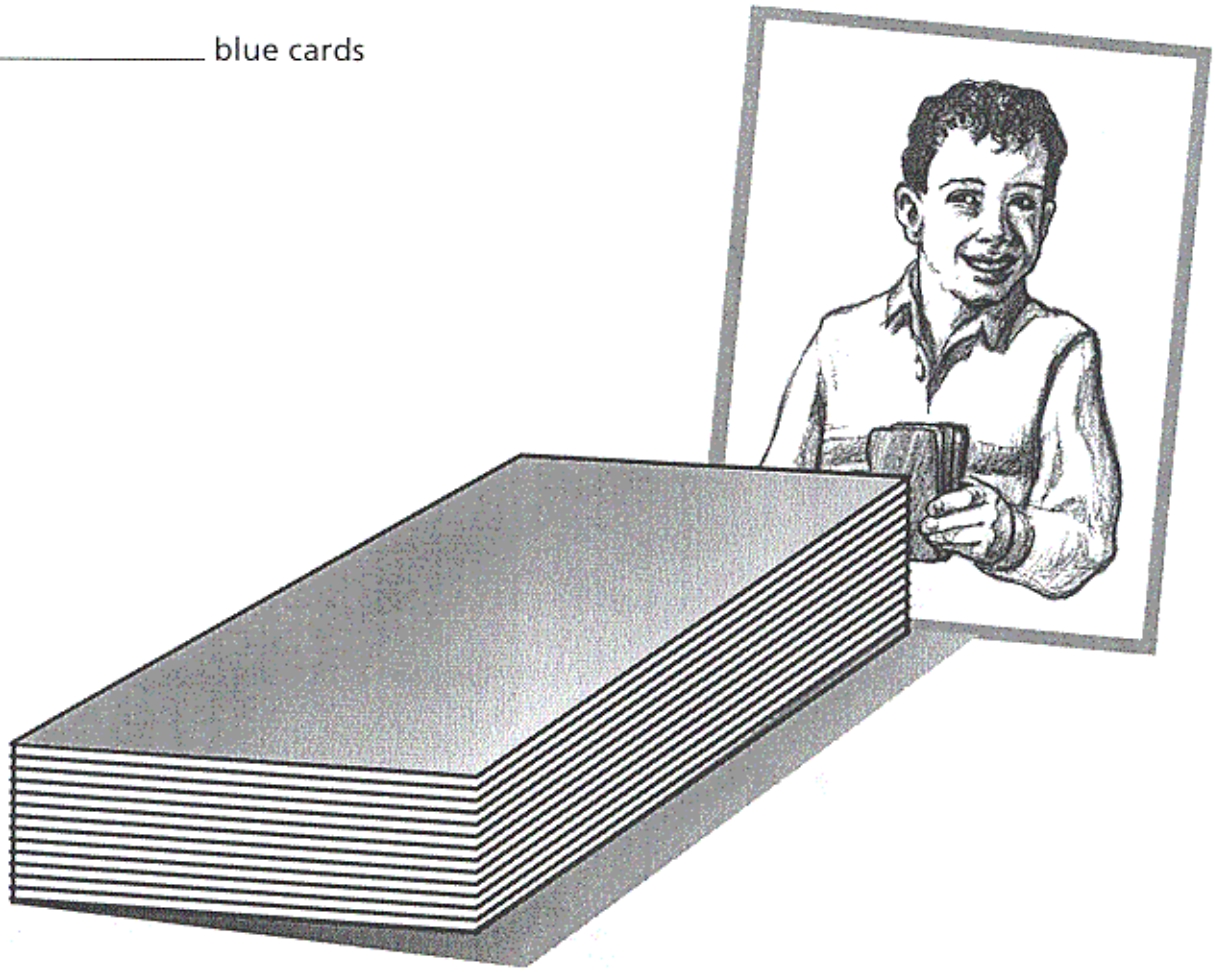
9 Use the information shown below to find the number of red cards and blue cards Carl has in his stack of cards.

> Carl has 4 yellow cards.
>
> He has 5 more red cards than yellow cards.
>
> He has 12 more blue cards than red cards.

How many red cards and blue cards does Carl have?

_____ red cards

_____ blue cards



Directions

Show all of your work and write your answers directly in this book.

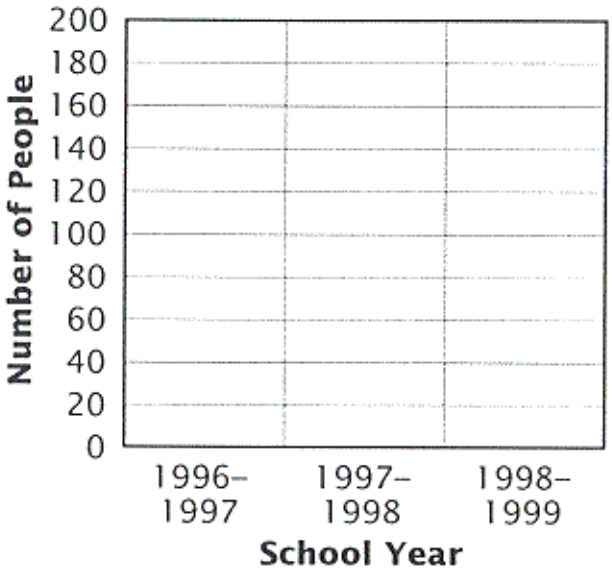
11 The Parents' Club at your school usually holds 4 different school events each year. Next year the parents want to limit the number of events to 3. You have been asked to help decide which 3 events should be held next year. Your principal has kept a chart that shows the number of people who attended each event for the last 3 years.

NUMBER OF PEOPLE WHO ATTENDED EVENTS

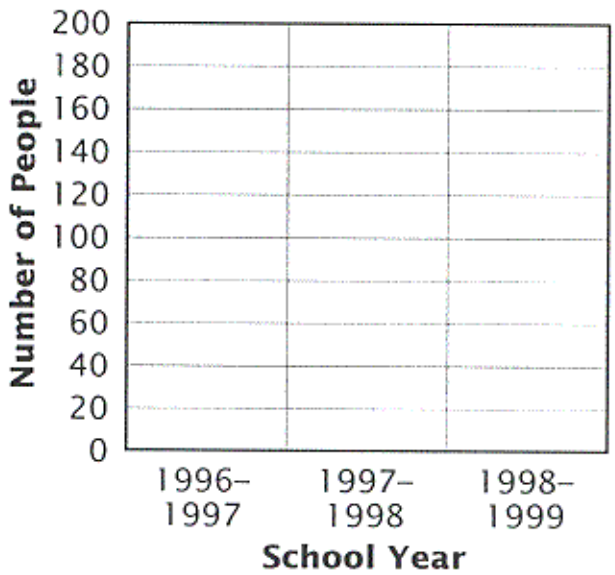
School Event	School Year		
	1996–1997	1997–1998	1998–1999
Carnival	150	130	140
Art Show	170	170	140
Math and Science Fair	120	140	150
Talent Show	150	160	140

Use the information from the chart on Page 12 to complete the bar graph for each event. Then find the total number of people who attended each event for the last 3 years. Write the total attendance for each event on the line below the title of each graph.

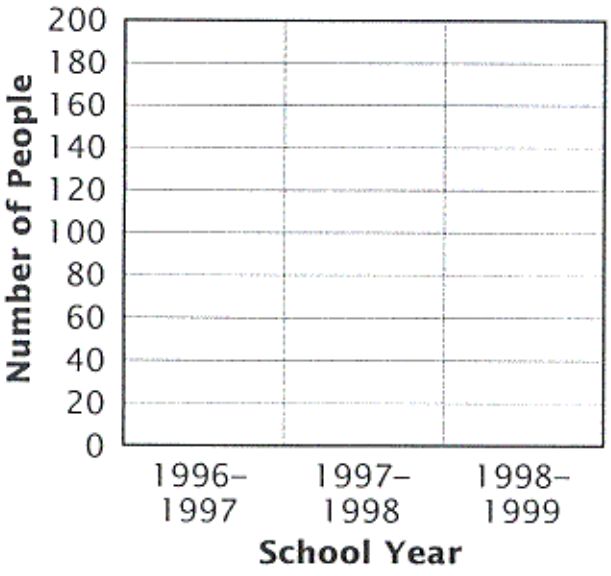
CARNIVAL
Total Attendance _____



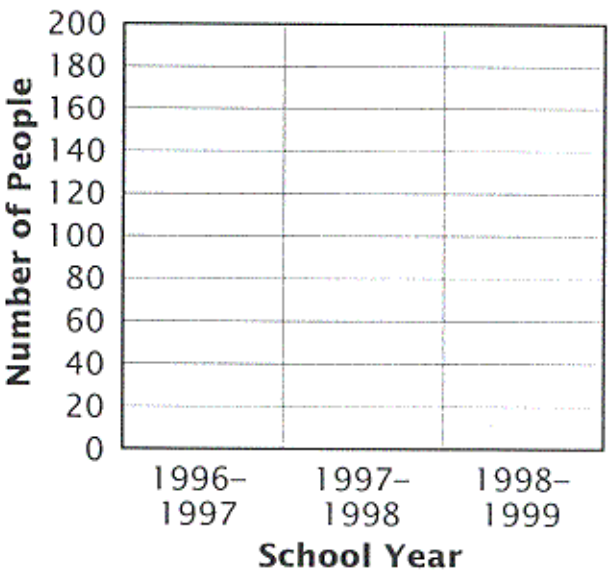
ART SHOW
Total Attendance _____



MATH AND SCIENCE FAIR
Total Attendance _____



TALENT SHOW
Total Attendance _____



Go On

In each box below, mark *Yes* for the 3 events that should be held and *No* for the 1 event that should not be held. Then explain each of your decisions, using information from the graphs on Page 13.

Carnival

☐ Yes ☐ No

Explanation:

Art Show

☐ Yes ☐ No

Explanation:

Math and Science Fair

☐ Yes ☐ No

Explanation:

Talent Show

☐ Yes ☐ No

Explanation:

STOP

Session: 1

Item No: 4

Page No: 5

Content Standard(s): 1 Number Sense

Process Standard(s): 3.7

Exemplary Response:

- No

AND

- Explanation equivalent to the following:

  (Eric's answer is not reasonable because) if 3 people each paid $4.50, they would pay much more than $7.50.

  OR

  They should have divided $7.50 by 3, not subtracted 3 from $7.50.

  OR

  Other valid explanation

Note: Give credit if student neglected to write "No" on the line, but the explanation indicates that the answer is not reasonable.

Score Points:

1 point Exemplary Response

0 points Other

Session:	1
Item No:	9
Page No:	10
Content Standard(s):	6 Discrete Mathematics
Process Standard(s):	3.5

Exemplary Response:

- 9 (red cards)

AND

- 21 (blue cards)

Score Points:

2 points	Exemplary Response
1 point	One component
0 points	Other

Session: 1

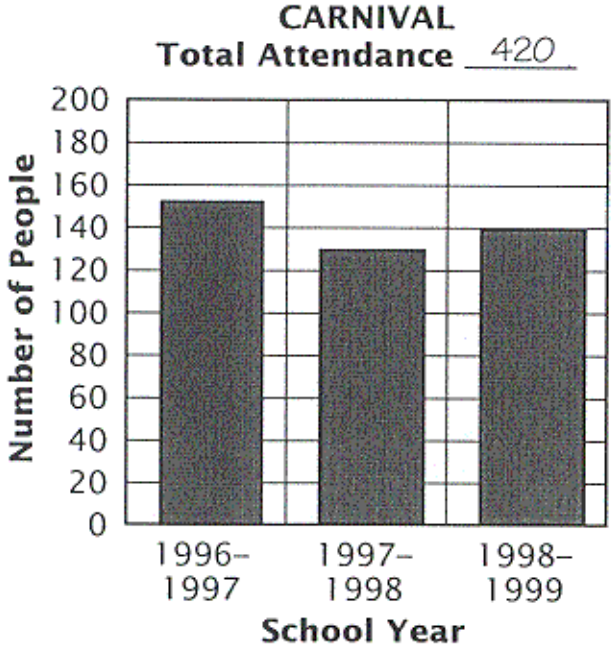
Item No: 11

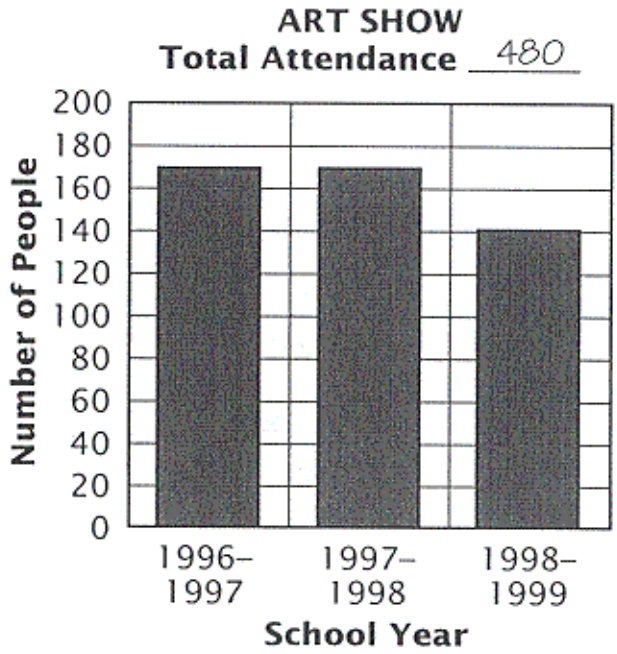
Page No: 12–14

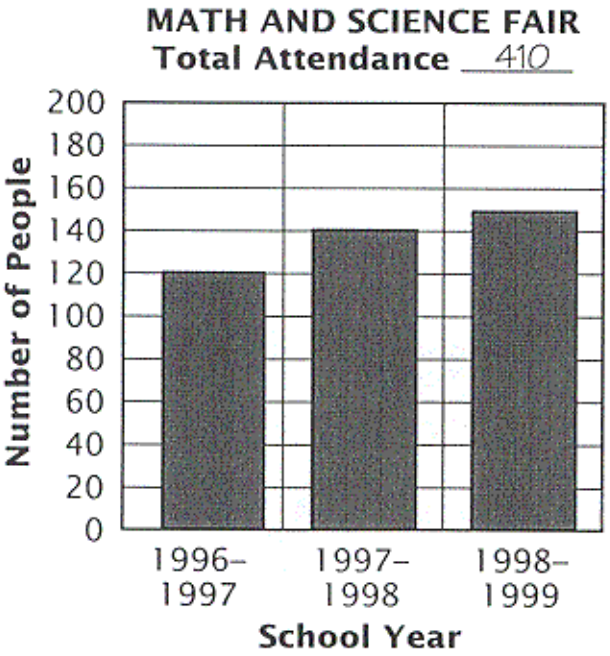
Content Standard(s): 3 Data Analysis, Probability, and Statistics

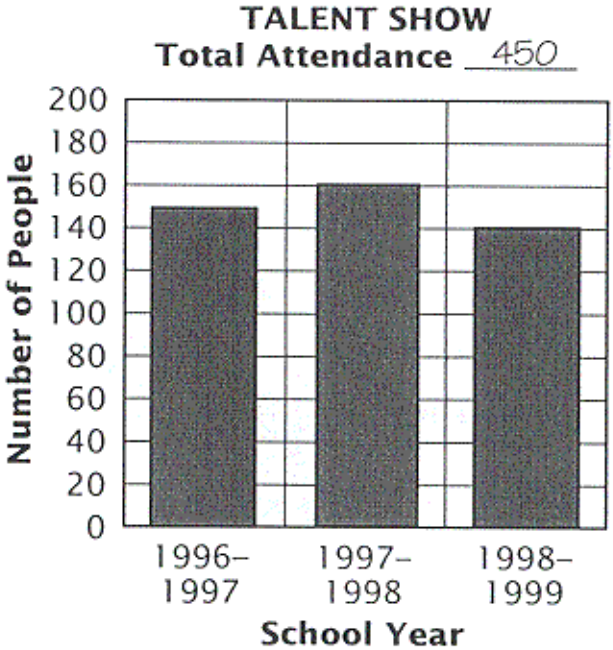
Process Standard(s): 1.5, 1.8

Sample Solution:









Session: 1

Item No: 11

Page No: 12–14

Content Standard(s): 3 Data Analysis, Probability, and Statistics

Process Standard(s): 1.5, 1.8

Three events selected (yes) and one not selected (no), each with one valid explanation equivalent to the following:

• Carnival:		Yes	The total attendance is high (420).
	OR	No	The attendance was lower the 2nd and 3rd year.
• Art Show:		Yes	The total attendance is high (480).
	OR	No	The attendance is down.
• Math and Science Fair:		Yes	The attendance is going up each year.
	OR	No	The total attendance is low (410).
• Talent Show:		Yes	The total attendance is high (450).
	OR	No	The attendance goes down the last year.
	OR	No	The attendance is at its lowest the last year.

OR

Other valid explanations

Session: 1

Item No: 11

Page No: 12–14

Content Standard(s): 3 Data Analysis, Probability, and Statistics

Process Standard(s): 1.5, 1.8

Score Points:

4 points The student's response fully addresses the performance event.

The response:

- demonstrates knowledge of the mathematical concepts and principles needed to complete the event.
- communicates all process components that lead to an appropriate and systematic solution.
- may have only minor flaws with no effect on the reasonableness of the solution.

3 points The student's response substantially addresses the performance event.

The response:

- demonstrates knowledge of the mathematical concepts and principles needed to complete the event.
- communicates most process components that lead to an appropriate and systematic solution.
- may have only minor flaws with minimal effect on the reasonableness of the solution.

2 points The student's response partially addresses the performance event.

The response:

- demonstrates a limited knowledge of mathematical concepts and principles needed to complete the event.
- communicates some process components that lead to an appropriate and systematic solution.
- may have flaws or extraneous information that indicates some lack of understanding or confusion.

Session: 1

Item No: 11

Page No: 12–14

Content Standard(s): 3 Data Analysis, Probability, and Statistics

Process Standard(s): 1.5, 1.8

1 point The student's response minimally addresses the performance event.

The response:

- demonstrates a limited knowledge of the mathematical concepts and principles needed to complete the event.
- communicates few or no process components that lead to an appropriate and systematic solution.
- may have flaws or extraneous information that indicates lack of understanding or confusion.

0 points Other—Responses not addressed by the Condition Codes:

Examples of "0":

Work consists of copying the prompt information only.
Work indicates no mathematical understanding of the task.